



Figure 4. Sediment textural data from surface grab samples displayed on Figure 2c (see Table 1 for additional textural data). Samples are divided into three facies based on the sea-floor sediment distribution derived from seismic profiles (Foster and others, 1999). These facies are: a) Modern sediment (red crosses) - sediment reworked from early Holocene estuarine sediment, Pleistocene glaciofluvial sediment, and Cretaceous Coastal Plain Strata; b) Early Holocene/Pleistocene sediment (black crosses) - samples collected from areas where Pleistocene glaciofluvial or early Holocene estuarine sediment outcrop; c) Cretaceous sediment lag (blue circles)- sediment reworked in the area of outcropping Cretaceous Coastal Plain Strata off Watch Hill, Long Island (see Figure 3). The sediments are further divided by textural characteristics into: a) coarse-grained lag deposits of Pleistocene sediment and Cretaceous strata; b) Fine-grained early Holocene estuarine sediment; and c) The most mobile sediment based on the textural characteristics of the modern sediment distribution.